

3-26-07

1657

PTO/SB/21 (09-06)

Approved for use through 03/31/2007. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/594,194	
	Filing Date	September 25, 2006	
	First Named Inventor	May Han	
	Art Unit	1657	
	Examiner Name	Not yet assigned	
Total Number of Pages in This Submission	7	Attorney Docket Number	GEN/033

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1. PTO/SB/08A 2. Copies of non-US patent references 3. Postcard
<div>Remarks</div> <p>The Director is hereby authorized to charge payment of any fees required in connection with filing of these papers to Deposit Account No. 06-1075, Order No. 001581-0281. A duplicate copy of this letter is transmitted herewith.</p>		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	Fish & Neave IP Group of Ropes & Gray		
Signature			
Printed name	Jane T. Gunnison		
Date	March 23, 2007	Reg. No.	38,479

CERTIFICATE OF EXPRESS MAILING - EV930026010US			
I hereby certify that this paper/fee and the listed enclosures are being deposited with the United States Postal Service "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to the Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.			
Signature			
Typed or printed name	Isatta B. Smith	Date	March 23, 2007

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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EXPRESS MAIL NO. EV930026010US

Attorney Docket No.: GEN/033

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : May Han  
Application No. : 10/594,194 Confirmation No.: 7781  
Group Art Unit : 1657  
Examiner : Not Yet Assigned  
Filed : September 25, 2006  
For : METHODS FOR MEASURING ENZYME ACTIVITIES  
IN CELLS, BLOOD, TUMORS AND TISSUES

New York, New York 10036  
March 23, 2007

**Mail Stop: Amendment**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97, applicants hereby make the following documents of record in the above-identified patent application:\*

UNITED STATES PATENTS

<u>Applicant</u>	<u>Patent No.</u>	<u>Issue Date</u>
Rubenstein et al.	3,875,011	April 1, 1975
Mahant et al.	5,624,813	April 29, 1997
Klaus et al.	6,284,787	September 4, 2001

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\* A completed form PTO/SB/08 listing these documents is attached hereto together with copies of all non-United States patent documents listed thereon.

## FOREIGN PATENT DOCUMENTS

<u>Country/Office</u>	<u>Publication No.</u>	<u>Publication Date</u>
EP	EP 1182259	February 27, 2002
PCT	WO 04/21000	March 11, 2004
PCT	WO 04/13347	February 12, 2004

## OTHER DOCUMENTS

Anderson et al., "A fluorimetric method for measurement of erythrocyte transketolase activity," *Annals of Clinical Biochemistry*, 23: 180-189 (1986).

Cascante et al., "Role of thiamin (vitamin B-1) and transketolase in tumor cell proliferation," *Nutrition and Cancer*, 36: 150-154 (2000).

Comin-Anduix et al., "The effect of thiamine supplementation on tumour proliferation: A metabolic control analysis study," *Eur. J. Biochem.*, 268: 4177-4182 (2001).

De Bersaques, "Enzymes of carbohydrate metabolism in human epidermal tumors part 4 enzymes of the pentose phosphate pathway," *Journal of Cutaneous Pathology*, 2: 246-253 (1975).

De Bersaques, "Enzymes of carbohydrate metabolism in naevoid basal-cell epithelioma," *Arch. Derm. Res.*, 256: 103-111 (1976).

De Bersaques, "Enzymes of carbohydrate metabolism in human epidermal tumors. 1. lactate, malate, and isocitrate dehydrogenases, alanine and aspartate aminotransferases," *J. Cutaneous Path.*, 1: 103-108 (1974).

Lib et al., "Immunocapture and microplate-based activity measurement of mammalian pyruvate dehydrogenase complex," *Analytical Biochemistry*, 314: 121-127 (2003).

Rex et al., "Bioavailability of reduced nicotinamide-adenin-dinucleotide (NADH) in the central nervous system of the anaesthetized rat measured by laser-induced fluorescence spectroscopy," *Pharmacology and Toxicology*, 90: 220-225 (2002).

Robb-Gaspers et al., "Coupling between cytosolic and mitochondrial calcium oscillations: role in the regulation of hepatic metabolism," *Biochimica et Biophysica Acta*, 1366: 17-32 (1998).

Smeets et al., "A NADH-dependent transketolase assay in erythrocyte hemolysate," *Clinica Chimica Acta*, 33: 379-386 (1971).

Vincent et al., "D-xylulose-induced depletion of ATP and Pi in isolated rat hepatocytes," *FASEB J.*, 3: 1855-1861 (1989).

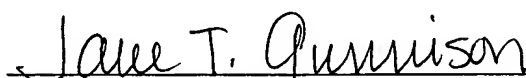
Zimatkina et al., "Antitumor and antivitamin activity of oxythiamine disulfide," *Database Biosis Online, Biosciences Information Service*, Database accession no. PREV199799321912.

It is respectfully requested that these documents be: (1) fully considered by the Patent and Trademark Office during the examination of this application; and (2) printed on any patent which may issue on this application. Applicants request that a copy of Form PTO/SB/08, as considered and initialized by the Examiner, be returned with the next communication.

This Information Disclosure Statement is being filed before the mailing of a first Office Action on the merits. In accordance with 37 C.F.R. § 1.97, submission of this Statement requires no fee. However, if for any reason a fee is due, the Director of the United States Patent and Trademark Office is hereby authorized to charge payment of any fees required in connection with this Information Disclosure Statement to Deposit Account No. 06-1075 (Order No. 001581-0281). A duplicate copy of this Statement is transmitted herewith.

An early and favorable action is respectfully requested.

Respectfully submitted,



Jane T. Gunnison (Reg. No. 38,479)

Attorney for Applicants

Fish & Neave IP Group

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<b>FOREIGN PATENT DOCUMENTS</b>						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>d</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
		EP 1182259	02-27-2002	Cirpus et al.		
		WO 04/021000	03-11-2004	Capaldi et al.		
		WO 04/013347	02-12-2004	Berghs et al.		
Examiner Signature				Date Considered		

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<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/594,194
				Filing Date	September 25, 2006
				First Named Inventor	May Han
				Art Unit	1657
				Examiner Name	Not Yet Assigned
Sheet	2	of	3	Attorney Docket Number	GEN/033

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
		Anderson et al., "A fluorimetric method for measurement of erythrocyte transketolase activity," <i>Annals of Clinical Biochemistry</i> , 23: 180-189 (1986).		
		Cascante Marta et al., "Role of thiamin (vitamin B-1) and transketolase in tumor cell proliferation," <i>Nutrition and Cancer</i> , 36: 150-154 (2000).		
		Comin-Anduix Begona et al., "The effect of thiamine supplementation on tumour proliferation: A metabolic control analysis study," <i>Eur. J. Biochem.</i> , 268: 4177-4182 (2001).		
		De Bersaques, "Enzymes of carbohydrate metabolism in human epidermal tumors part 4 enzymes of the pentose phosphate pathway," <i>Journal of Cutaneous Pathology</i> , 2: 246-253 (1975).		
		De Bersaques, "Enzymes of carbohydrate metabolism in naevoid basal-cell epithelioma," <i>Arch. Derm. Res.</i> , 256: 103-111 (1976).		
		De Bersaques, "Enzymes of carbohydrate metabolism in human epidermal tumors. 1. lactate, malate, and isocitrate dehydrogenases, alanine and aspartate aminotransferases," <i>J. Cutaneous Path.</i> , 1: 103-108 (1974).		
		Lib et al., "Immunocapture and microplate-based activity measurement of mammalian pyruvate dehydrogenase complex," <i>Analytical Biochemistry</i> , 314: 121-127 (2003).		
		Rex et al., "Bioavailability of reduced nicotinamide-adenin-dinucleotide (NADH) in the central nervous system of the anaesthetized rat measured by laser-induced fluorescence spectroscopy," <i>Pharmacology and Toxicology</i> , 90: 220-225 (2002).		

Examiner Signature		Date Considered	
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